

PTSPS075 Temperature Host and Sensor

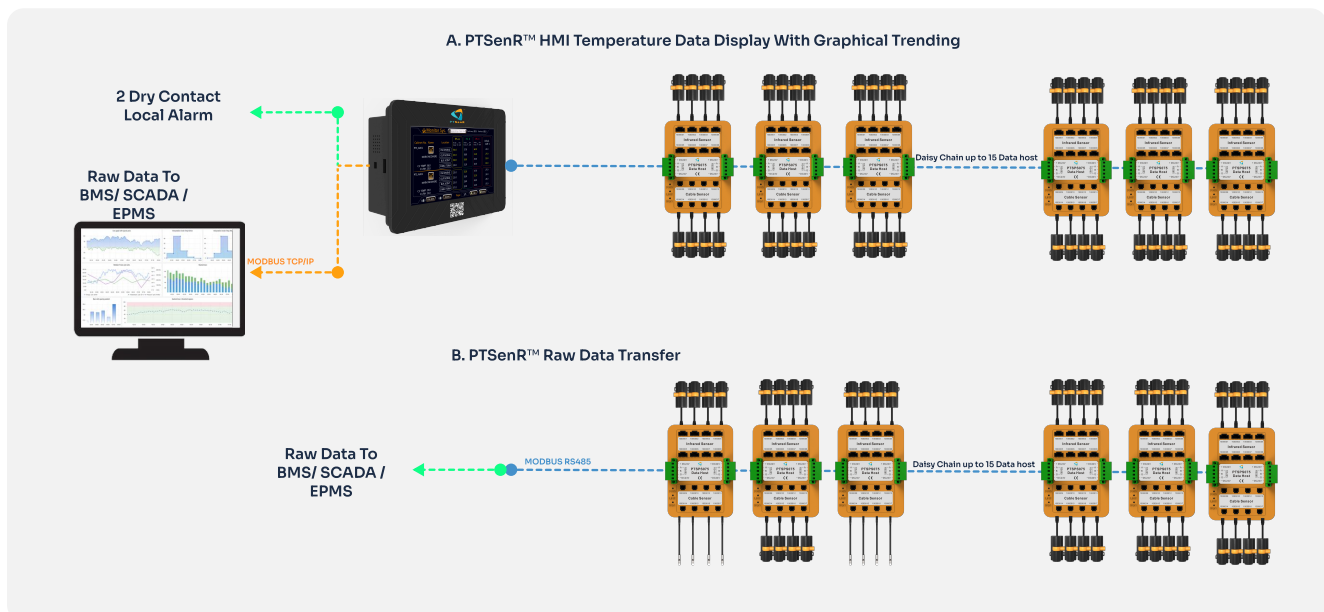
Product Overview

The PTSenR™ PTSPS075 is an advanced temperature monitoring solution designed to deliver precise and reliable data acquisition across a wide range of electrical systems. This innovative sensor measures multiple critical points, including conductor and joint temperatures, providing comprehensive thermal insights.

Installed at the electrical termination node, the PTSPS075 continuously gathers temperature data and transmits it to a central monitoring system. This enables real-time condition monitoring and timely alerts, supporting proactive maintenance and enhancing the safety and efficiency of low-voltage switchboard cabinets.

Engineered specifically for installation within electrical switchboards, the PTSPS075 offers high accuracy, durability, and dependable performance in demanding environments. With its robust design and ease of integration, it serves as a vital tool for maintaining operational integrity and minimizing downtime in electrical systems.

System Architecture

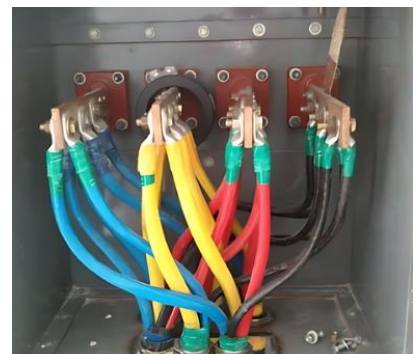
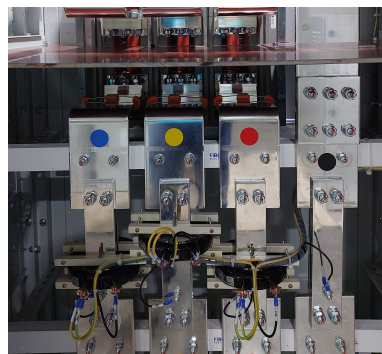
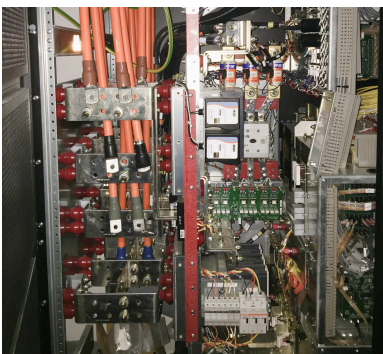


Applications

UPS Termination

LV Switch Board Busbar

LV Transformer Terminations



Characteristics

The PTSenR™ PTSPS075 features eight IR sensors and eight cable sensors, delivering comprehensive temperature monitoring. Its plug-and-play design with quick-connect terminals enables fast, hassle-free installation. The device converts input signals into accurate temperature readings without requiring external power, providing an efficient solution for continuous monitoring. Data is communicated via the industry-standard RS485 Modbus RTU protocol.

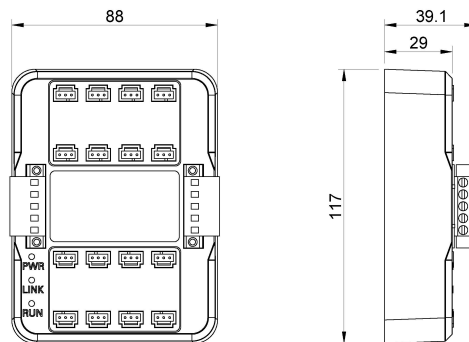
The Datahost is DIN rail mountable and powered by 24 V DC, with daisy-chain capability to simplify power distribution. Integrated LEDs indicate system health, power status, and communication activity. Sensors connect easily to the front of the Datahost via quick-connect terminals. The PTSPS075 cable sensors are specifically designed for thermal monitoring of cables connected to terminals, circuit breakers, or busbar connections.

Engineered for reliability, the sensors are enclosed in a rugged, durable housing that ensures protection of the sensitive temperature-sensing element. The design supports fast and straightforward installation, making them well-suited for demanding industrial applications.



Dimensions

(Unit: mm)



Specifications

Data Host	
Power Supply Input Voltage	24VDC (±15%)
Dimension	117 x 88 x 39.1 (mm)
Weight	280 grams
Consumption	< 3W
Storage Temperature	-10°C ~ 75°C
Operating Temperature	-40°C ~ 85°C
Relative Humidity	≤95% RH (non-condensing)
Flammability Rating	V0 (700°C 30 Seconds)
Data Transmission	RS485
Sensor Inputs	16 Channels
Functions	Signal processing, Conditioning, Linearisation, Scaling
Mounting Method	Standard 35 mm guide rails
Sample Rate	200 ms
Transmission Interval	50 seconds ~ 310 seconds
Protection Level	IP 4X
Withstand Voltage	2.5 KV
Impulse Withstand Voltage	Uimp = 8 KV

Cable Sensor	
Sensor Type	NTC
Cable Length	6m
Accuracy	±1°C
Temperature Measurement	-40°C ~ 125°C (-40°F ~ 275°F)
Storage Temperature	-10°C ~ 75°C
Operating Ambient Temperature	-40°C ~ 85°C
Cable Type	LZOH Teflon
Cable Rating	300V / 90°C (194°F)

Compliance	EN 62479; EN 61326; DNVGL-CG-0339; EN 220, 300, 301, 400, 489
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Ordering Information	
Part Number	PTSPS075
PTSPS075 H	PTSenR™ Sensor Data Host (16 Channels)
PTSPS075 C	PTSenR™ Cable Probe, 6m